Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
T +1 202 637 5600
F +1 202 637 5910
www.hoganlovells.com

Trey Hanbury
Partner
T: 202.637.5534
trey.hanbury@hoganlovells.com

September 23, 2013

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: ***Ex Parte Notice***

Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268*;*
Policies Regarding Mobile Spectrum Holdings, WT Docket No. 12-269

Dear Ms. Dortch:

On September 19, 2013, Kathleen Ham, Chris Wieczorek, Karri Kuoppamaki, Michael Amend, and Steve Sharkey of T-Mobile USA, Inc.[1] ("T-Mobile"), Dr. Greg Rosston and Dr. Andrzej Skrzypacz, consultants to T-Mobile, and Trey Hanbury of Hogan Lovells US LLP (counsel to T-Mobile), met with Margaret Wiener, John Leibovitz, Joel Taubenblatt, Jonathan McCormack, Paroma Sanyal, and Martha Stancill of the Wireless Telecommunications Bureau, Gary Epstein of the Incentive Auctions Task Force, Omar Nayeem and Evan Kwerel of the Office of Strategic Planning and Policy Analysis, and Ilya Segal and Jonathan Levin of Auctionomics, a consulting firm that is advising the Commission regarding auction theory, to discuss the attached paper.

The attached economic study by Dr. Gregory Rosston and Dr. Andrzej Skrzypacz, entitled *Further Explanation of the Dynamic Market Rule*,[2] elaborates on how the Commission can use standard auction-design mechanisms to put the revenue effects of spectrum aggregation limits to a market test.

---

[1] T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.
[2] Dr. Rosston is the Deputy Director of the Stanford Institute for Economic Policy Research, the Deputy Director of the Public Policy Program, and a Professor of Economics (by courtesy) at Stanford University. Prior to joining Stanford, Dr. Rosston was Deputy Chief Economist at the Federal Communications Commission, where he helped to design and implement the first ever spectrum auctions in the United States. Dr. Skrzypacz is the Theodore J. Kreps Professor of Economics at the Stanford Graduate School of Business and is a co-editor of the American Economic Review. He has advised bidders in spectrum auctions in several countries and his research focuses on auction theory, market design, and game theory.

T-Mobile has joined the great majority of commenters in this proceeding in support of reasonable spectrum-aggregation limits in the upcoming 600 MHz incentive auction.[3] As the U.S. Department of Justice has observed, reasonable spectrum-aggregation limits promote competition by limiting the ability of dominant incumbents to prevent competitors from gaining access to the resources they need to compete.[4] By encouraging more bidders and more robust bidding, reasonable limits on spectrum aggregation can also encourage higher auction prices and higher revenues for the public interest purposes identified in the Middle Class Tax Relief Act of 2012.[5]

In response to allegations from AT&T that common-sense limits on resource concentration might limit auction revenue, however, T-Mobile proposed the Dynamic Market Rule with a minimum access exception to ensure that all providers can acquire spectrum in all markets.[6] As Dr. Rosston and Dr. Skrzypacz have explained, the Dynamic Market Rule effectively relies on actual bids rather than predictions of expected behavior to determine whether an auction with spectrum-aggregation limits will raise sufficient revenue.

The attached economic study responds to questions posed by AT&T and Verizon regarding the Dynamic Market Rule concerning revenue and exposure risk. In the study, Dr. Rosston and Dr. Skrzypacz begin by refuting the criticism that the Dynamic Market Rule will necessarily reduce auction revenues.[7] Taking the same example used by AT&T to critique the Dynamic Market Rule, the authors demonstrate that a single minor change to the arbitrary values in that example produces *higher* revenues with spectrum-aggregation limits and the Dynamic Market Rule than an auction without any spectrum-aggregation limits. This result holds true even if the lack of limits would have no negative impact on participation and competition in the forward auction, an assumption T-Mobile challenges. Dr. Rosston and Dr. Skrzypacz also dismiss the critique that the Dynamic Market Rule will introduce new exposure risk because intra-round bids cannot be

---

[3] *See*, *e.g.*, Notice of Ex Parte Presentation of Sprint Corporation, GN Docket No. 12-268 & WT Docket No. 12-269 (July 29, 2013); Ex Parte Submission of Rural Telecommunications Group, Inc., GN Docket No. 12-268, WT Docket No. 12-269, WT Docket No. 12-69, & WT Docket No. 05-265 (June 21, 2013); Reply Comments of U.S. Cellular Corp., GN Docket No. 12-268 (Mar. 12, 2013); Comments of Cellular South, Inc., GN Docket No. 12-268 (Jan. 25, 2013); Comments of United States Cellular Corporation, GN Docket No. 12-268 (Jan. 25, 2013); Comments of Free Press, GN Docket No. 12-268 (Jan. 25, 2013); Comments of Public Interest Spectrum Coalition, GN Docket No. 12-268, WT Docket Nos. 08-166, & 08-167, ET Docket No. 10-24 (Jan. 25, 2013).

[4] Ex Parte Submission of U.S. Department of Justice, WT Docket No. 12-269 (Apr. 11, 2013); *see also, e.g.*, Ex Parte Submission of the Competitive Carriers Association, GN Docket No. 12-268 & WT Docket No. 12-269 (May 9, 2013); Ex Parte Submission of Consumer Federation of America, GN Docket No. 12-268 & WT Docket No. 12-269 (June 3, 2013); Ex Parte Submission of Rural Telecommunications Group, Inc., GN Docket No. 12-268, WT Docket No. 12-269, WT Docket No. 12-69, & WT Docket No. 05-265 (June 21, 2013).

[5] Middle Class Tax Relief and Job Creation Act of 2012, Pub L. No. 112-96, 126 Stat. 156 (2012); *see, e.g.*, Ex Parte Notice of Competitive Carriers Association, GN Docket No. 12-268 & WT Docket No. 12-269 (June 28, 2013); Ex Parte Notice of C Spire Wireless et al., GN Docket No. 12-268 & WT Docket No. 12-269 (May 20, 2013); Reply Comments of Sprint Nextel Corporation, GN Docket No. 12-268 (Mar. 12, 2013).

[6] *See* Ex Parte Notice of T-Mobile USA, Inc., GN Docket No. 12-268 & WT Docket No. 12-269 (June 21, 2013); Ex Parte Notice of T-Mobile USA, Inc., GN Docket No. 12-268 (July 26, 2013).

[7] *See, e.g.*, Yeon-Koo Che and Philip A. Haile, "Comments on T-Mobile's 'Dynamic Market Rule' Proposal," attached to Ex Parte Presentation of AT&T Inc., WT Docket No. 12-268 (Aug. 13, 2013).

processed as package bids in every area under the Dynamic Market Rule. The authors explain how the Commission could readily incorporate the same intra-round package bidding into the Dynamic Market Rule as it would without the rule.

The authors also note that spectrum-aggregation limits would be most restrictive in areas where the incumbent carriers already possess the most spectrum. In other words, the limits will only constrain incumbents where they already have ample low-band spectrum resources. In areas where incumbents have little spectrum and need more to construct or expand their low-band networks, the limits will permit substantial acquisitions and be the least burdensome. Moreover, regardless of geography, the proposed spectrum-aggregation limits permit incumbents to acquire at least 5x5 MHz of spectrum in every market in the country and in many cases much more.[8] By contrast, spectrum-aggregation limits and the Dynamic Market Rule will substantially reduce exposure risk for small carriers because they will no longer face the threat of being foreclosed from key licenses because of strategic bidding from the two dominant incumbents. Since competition from smaller carriers is crucial for driving prices up and promoting competition in the forward auction, this reduction of the exposure risk for those smaller carriers should provide additional upward pressure on revenues.

Dr. Rosston and Dr. Skrzypacz conclude by elaborating on how the Dynamic Market Rule would work within the proposed extended round framework. Specifically, they detail a step-by-step mechanism to seamlessly incorporate extended rounds into the Dynamic Market Rule to further simplify the auction rules while maintaining the two crucial elements of the DMR, namely: (1) providing incentives for bidders to bid up to their limits if they would like to have those limits relaxed and (2) relaxing the limits gradually to further intensify competition.

This economic study illustrates how, by creating a market test for spectrum-aggregation limits, the Dynamic Market Rule preserves the competition- and revenue-enhancing effects of spectrum-aggregation limits while ensuring that they never jeopardize the auctions' clearing target.

Pursuant to Section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter is being filed for inclusion in the above-referenced dockets.

Respectfully submitted,

/s/ Trey Hanbury

Trey Hanbury
Counsel to T-Mobile USA, Inc.

Attachment A

---

[8] *See* Ex Parte Notice of T-Mobile USA, Inc., GN Docket No. 12-268 & WT Docket No. 12-269 (June 21, 2013); Ex Parte Notice of T-Mobile USA, Inc., GN Docket No. 12-268 (July 26, 2013).